

**Franklin County Board of Health
Annual Summary of Communicable Diseases
2005**

*Prepared
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Introduction

Communicable Diseases are illnesses caused by microorganisms such as bacteria, viruses and parasites and are transmitted from an infected person/animal and/or contaminated food or water source to another person or animal. Most communicable diseases spread from direct contact to the bacteria or viruses that are expelled into the air by an infected person. Some diseases can be spread only indirectly through contaminated food and water sources. Other diseases are introduced into the body by animals or insects carrying the infectious agent.

For over four years, the Columbus and Franklin County Health Departments have joined forces to make the reporting, tracking and investigation of communicable disease cases easier and convenient through the **Communicable Disease Reporting System (CDRS)**. This provides early identification of potential outbreaks and new trends in infectious diseases. The Communicable Disease staff ensures proper investigation, timely case follow-up of all reports and preventive interventions to reduce secondary cases.

Key Findings for 2005

In 2005, a total of **1,009** cases of communicable diseases were reported in Franklin County (*Columbus City jurisdiction cases are not included*). Of these, **707** were **confirmed**, **60** were **probable**, **220** were **suspected** and **22** were **unknown or not a case**. **Hepatitis C** was the most frequently reported disease, representing **49%** of the total reported cases.

Franklin County receives communicable disease reports from hospitals, physicians, and laboratories. The numbers below (Table 1) are representative of only those cases reported to the board of health. As noted, some jurisdictions have an increased prevalence. It is inaccurate to infer that these jurisdictions necessarily maintain a higher incidence of disease, but rather the increase may be the result of better reporting or greater access to healthcare resources.

The Board of Health strives to educate our health care community about the importance of reporting, as this enables a more comprehensive assessment of the disease burden in our communities.

Table 1. TOTAL NUMBER OF CONFIRMED CASES WITHIN RESPECTIVE CITIES, TOWNSHIPS AND VILLAGES

<u>CITY/TOWNSHIP/VILLAGE</u>	<u># CONFIRMED CASES REPORTED</u>
BEXLEY	29
BLACKLICK	<5
BLENDON	5
CANAL WINCHESTER	10
CLINTON	6
DUBLIN	36
FRANKLIN	12
GAHANNA	28
GRANDVIEW	6
GROVE CITY	22
GROVEPORT	7
HAMILTON	7
HILLIARD	26
JACKSON	12
JEFFERSON	6
MADISON	11
MARBLE CLIFF	<5
MIFFLIN	13
MINERVA PARK	<5
NEW ALBANY	8
NORWICH	7
OBETZ	5
PERRY	<5
PLAIN	10
PLEASANT	5
PRAIRIE	30
REYNOLDSBURG	43
RIVERLEA	<5
SHARON	5
TRURO	<5
UPPER ARLINGTON	43
WASHINGTON	<5
WESTERVILLE	41
WHITEHALL	30
NO ADDRESS REPORTED	217

**Cities/Townships/Villages omitted signifies no confirmed diseases reported in 2005*

Disease Specific Highlights

Pertussis, or whooping cough, is a highly contagious respiratory infection caused by the bacteria *Bordetella pertussis*. The disease is primarily spread by direct contact with the nose and throat secretions from an infected individual. Frequently, older siblings or other adult household members who may be harboring the bacteria in their nose and throat can bring the disease home and infect an infant in the household. Initially, the symptom resembles the common cold, i.e., mild cough, sneezing, runny nose, and low-grade fever. Within two weeks, the cough becomes more severe and is characterized by episodes of rapid coughs followed by a crowing or high-pitched whoop. The symptoms start to appear after 7 to 10 days, with a range of 4 to 21 days after exposure to the bacteria. An infected person can transmit pertussis from the onset of symptoms to three weeks after the onset of cough. The period of communicability can be reduced to five days after appropriate antibiotic therapy. To prevent the spread of pertussis it is important that the cases are treated with appropriate antibiotics. It is also essential that the close contacts receive appropriate antibiotic treatment. Children should be immunized with the DTaP vaccine at 2, 4, 6 and 15 to 18 months of age and between 4 and 6 years of age.

Two new products for a single dose booster immunization against pertussis, in combination with tetanus and diphtheria (Tdap) were licensed by FDA in 2005. **GlaxoSmithKline's BOOSTRIX®** is indicated for persons aged 10-18 years and **Sanofi Pasteur's ADACEL™** is indicated for persons aged 11-64 years.

Table 2 shows that pertussis was the second most frequently reported disease for 2005 after Hepatitis C. It represents about 16% of the total reported diseases (*confirmed cases only*).

Table 2. Top 5 Confirmed Cases Reported to Franklin County Board of Health in 2005

DISEASE	# OF CASES
PERTUSSIS	109
CAMPYLOBACTERIOSIS	46
GIARDIA	34
SALMONELLA	34
STREPTOCOCCUS PNEUMONIAE	34

Number of Hep C cases (345 for 2005) are not included in the above table

In 2005, 109 confirmed cases of pertussis have been reported. This reported number is approximately twice the number of cases reported in 2003 (see Table 3). This increase in reported cases could be due to better diagnostics and reporting. Also, this could be a true increase in disease in the community.

Figure 1 illustrates the age range for Franklin County pertussis cases. Nearly 40% of the cases are within the range of 10-14 years of age, followed by 24% of the cases in 0-4 years of age. This increase in cases among adolescents can be explained by waning vaccine induced immunity. Immunity declines as you get 5-10 years away from the last dose of vaccine.

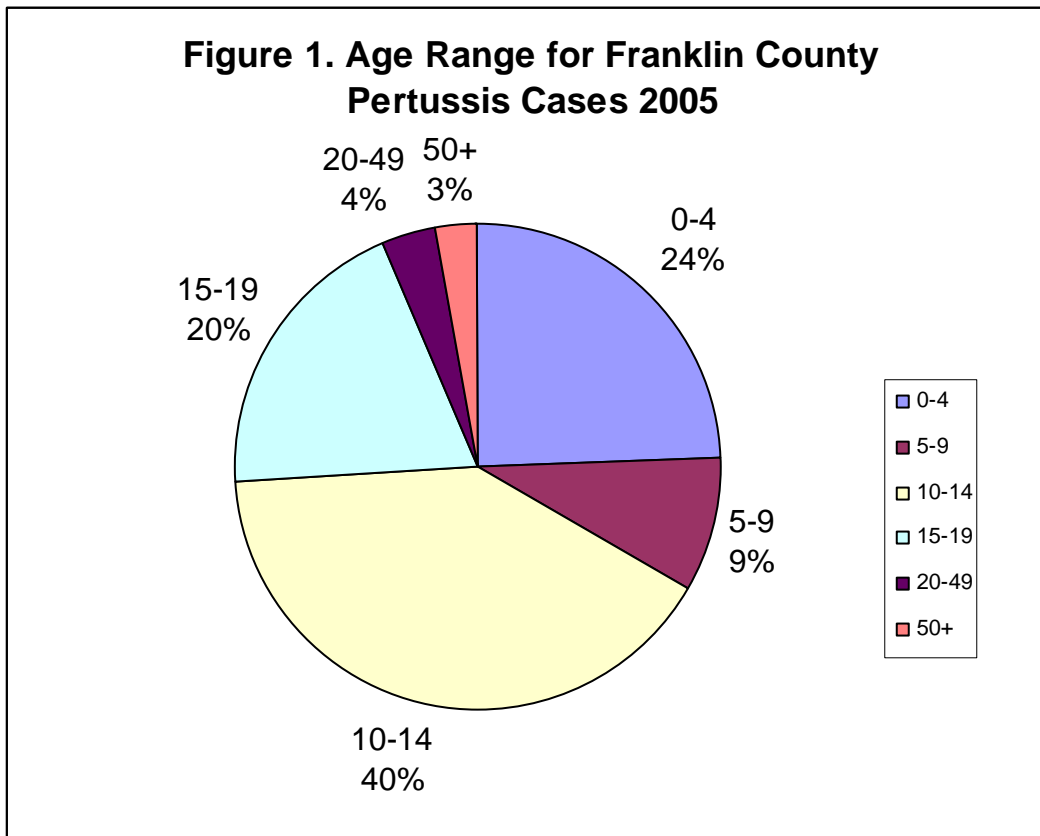
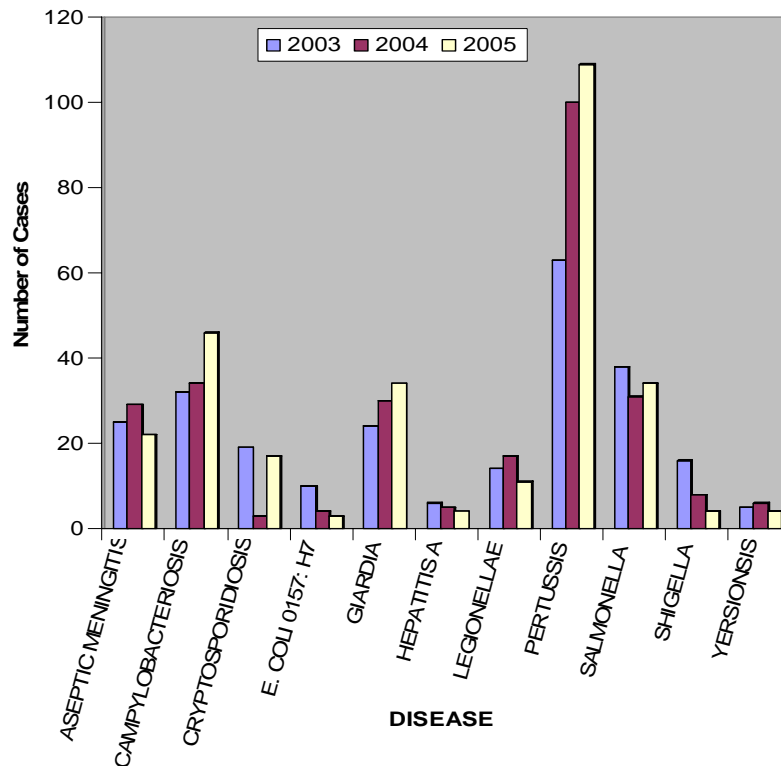


Table 3 and Figure 2 illustrate frequency and comparisons for certain selected diseases for years 2003 through 2005.

**Table 3. Number of Confirmed cases for Selected Disease
Reported to Franklin County Board of Health**

DISEASE	# OF CASES		
	2005	2004	2003
ASEPTIC MENINGITIS	22	29	25
CAMPYLOBACTERIOSIS	46	34	32
CRYPTOSPORIDIOSIS	17	3	19
E. COLI 0157: H7	3	4	10
GIARDIA	34	30	24
HEPATITIS A	4	5	6
LEGIONELLAE	11	17	14
PERTUSSIS	109	100	63
SALMONELLA	34	31	38
SHIGELLA	4	8	16
YERSINIOSIS	4	6	5

Figure 2. Number of Confirmed Cases for Selected Diseases



References

- ODH Infectious Disease Manual
<http://www.odh.ohio.gov/healthResources/infectiousDiseaseManual.aspx>
- “Immunization Update 2005” Satellite Broadcast, July 28, 2005
- Advisory Committee on Immunization Practice (ACIP) Recommendations on Tdap Vaccine for Adolescents Document.

If you have additional questions, comments or concerns about this report, please contact

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